



# PATRICK HARRISON CONSTRUCTORS, INC.

Mining Contractors • Engineers,  
Services To  
Railroad Heavy - Haul Systems

January 23, 1998,

Mr. Dan Proctor, Chief Geologist  
Clifton Mining Company  
70 West Canyon Crest Road Suite D  
Alpine, UT 84004

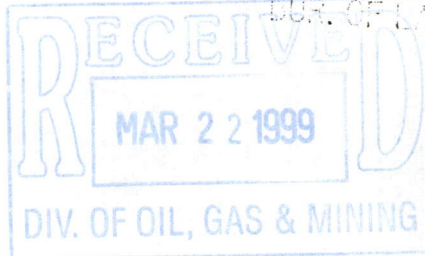
Dear Dan:

I have reviewed Clifton Mining's Reclamation Plan for their milling operation in Gold Hill, Utah. Based on my familiarity with the site after several visits, I find the methodology sequence to be attainable, adequate and in line with mining industry standards. I have also reviewed the cost projections and find them properly evaluated, yielding a sum, which I expect, will be sufficient to complete the tasks set out.

Yours truly,

Clarence Marchand, P.Eng

Vice President



**CLIFTON MINING COMPANY, INC.**  
**70 West Canyon Crest Road, Suite D**  
**Alpine, Utah 84004**  
**(801) 756-1414 Fax (801) 756-5454**

**To:** Unites States Department of the Interior  
Bureau of Land Management  
Salt Lake District Office  
2370 South 2300 West  
Salt Lake City, Utah 84119  
c/o Mr. Mike Ford

**Date:** 02 January 1998

**Re:** U-7399 (UT-023) 3809, Gold Hill Mill Reclamation Plan

Dear Mr. Ford,

After our conversation on Dec. 30<sup>th</sup> 1997, it was brought to my attention that the November 20, 1997 response to your Nov. 06, 1997 request was not adequate. I have been asked by Mr. Wm. Moeller and Mr. Robert Holladay to respond to your latest request. During your absence we have been trying to comply with Ms. Martinez at your office and have responded to her requests to the best of our understandings of what she wanted. However, it now appears that what she requested was misunderstood, and for that you have my apologies. It is understood that the area to be reclaimed is the eight (8) acres we previously agreed upon, which is the area within the fenced compound as it now stands. Please bear in mind that the BLM and the State of Utah calculate surface disturbance differently which has been a source of confusion.

The following is a description of the methods, including the sequence and timing, that will be used to complete the final reclamation of the land disturbed by our milling operation:

- #1. At least 30 days before the termination of our milling operations at the Catus Millsite, in T. 7S., R. 18W., Section 35, you will be notified in order to make a final inspection of the site prior to beginning our reclamation plan.
- #2. All surplus chemicals used at the milling operation and all hazardous waste will be identified and removed from the site. These items will either be properly disposed of or stored in a secured location. It should be noted that the chemicals used with our milling operation are not toxic and have been deemed environmentally safe. However, the removal of all chemicals and hazardous waste is closely monitored by MSHA and the EPA. Strict guidelines must be followed during this phase of the reclamation plan. Timing of this portion of the reclamation work is dependent on approvals from MSHA and the EPA. In any event it will be carried out in a safe, orderly and timely fashion.
- #3. Removal of all equipment and scrap. Prior to the termination of operations, all of the equipment and scrap at the mill site will be identified and inventoried and the inventory submitted to your office. Most pieces of equipment at the mill will then be advertised in

appropriate publications for sale, your office will be given copies of such advertisements. All potential buyers will be notified that upon termination of our operations they will have ninety (90) days to remove any pieces of equipment that they have purchased and that removal of such equipment will be at their expense. In the event not all the equipment is sold and removed, Clifton will bear the expense of removal of all remaining pieces of equipment. Most of the equipment can be easily loaded with a FEL (front-end-loader) and transported on flatbed semi trailers. However it will be necessary to mobilize a 30 ton crane to load the ball mills. It is estimated that at least 12 semi trailer loads will be necessary to remove all equipment and scrap not including the primary crusher which is already a portable crushing plant, no loading is needed. All equipment will be moved off site to a private secure location where it can be sold or "scraped-out".

- #4. Removal of steel building and office/lab trailer. Prior to termination of the milling operation along with all pieces of equipment the steel building as well as the office/lab trailer will be advertized for sale. Potential buyers will be notified that they will have no more than ninety (90) days after operation termination to remove such structures at their own expense. In the event that these structures are not sold and removed, Clifton will also bear the expense of removing these structures. In conjunction with other reclamation work on the site a trackhoe will be mobilized on site to aid in the dismantling of the steel building. All pieces of the building will be loaded on to semi trailers and moved off-site. The office/lab trailer will be fitted with wheels and hauled off-site.
- #5. Demolition of the old wood framed mill building. This structure will be torn down using the trackhoe and all debris from this structure will be placed in an adjacent existing slope-cut for burial.
- #6. Removal of all cement structures. The existing cement structures include mill floors, walls and foundations, ball mill bases, crushed ore storage bin, product storage bin, and pad near office. These structures will be fragmented by jack hammer and/or trackhoe. Fragmented mill floors and walls will be pushed into adjacent existing slope-cuts with a dozer, as will the fragmented crushed ore storage bin and ball mill bases. All other fragmented structures will be loaded on to dump trucks and hauled to existing on-site slope-cuts for eventual burial.
- #7. Removal of fence and gates. Until the completion step #6 the fence will act as a safety around the reclamation perimeter. Upon completion of step #6 the fence will be taken down along with all gates and moved off site where it can be salvaged for future use. This work will be accomplished with use of a backhoe and two men. However removal of the fence may be better accomplished after successful revegetation of the area.
- #8. Recontour building, road and storage area slope-cuts. Material (tails) will be imported from the tailings area and placed on the fragmented cement and demolished wood building which were previously placed in the slope-cuts. Followed by pulling in all berms and replacing existing sidecast material over the covered debris, until the hill is returned to its natural slope.

An estimated 15,000 tons (6,700 CY) of material (fill) will be placed in the slope-cuts to achieve the natural slope.

- #9. Ripping access roads. All roads except the road which is located outside the once fenced area will be ripped with a dozer and recontoured to match the natural slope, not including the roads previously filled in step #8.
- #10. Tailings pile recontouring and blending into surrounding natural topography. The tailings impoundment or dam material, which consists of the native soil of the area, will be pushed into separate piles and segregated from the tails. At this same time the water pit impoundment material, which is also native material, will also be pushed into a separate pile. The tails which contain a high percentage of clay and soil that will support native vegetation, will be spread out over the lower compound area to a final grade of 5% or as near natural slope as possible and then evenly covered with the native impoundment material.
- #11. Seeding area with recommended seed mix (refer to 10 Dec1997 letter regarding seed mix). After completing steps #1 through #10, the area is now ready to be reseeded. Prior to seeding the disturbed areas will be scarified. The entire disturbed area will be fertilized. Fertilizer will be broadcast at a rate of 100 lbs per acre. The areas where slope-cuts have been filled it is recommended that these areas be hydroseeded in order to achieve an erosion resistant slope as soon as possible. All other areas will be broadcast seeded. Seeding will be completed during the recommended time of the year. (Successful revegetation will be determined over the next two years.)
- #12. General site clean-up. Proper disposal of all fertilizer and seed bags and other misc. trash that may have accumulated during the reclamation of the millsite.

The above sequence of events should be accomplished within twelve (12) months from the termination of our milling operations at this site. However, the time may be longer depending on the time of the year when operations cease and when approval is given from EPA and other agencies to continue. Below is an estimate of the costs associated with the above reclamation plan.

Note: actual unit costs may vary according to site conditions, last unit cost update 04/18/97  
Unit costs were compiled by Utah State Division of Oil, Gas and Mining and actual costs were derived from actual contractor bids.

Estimated total disturbed area for this project, present and contemplated 8 acres.

Activity	Quantity/Units	\$/units	\$ note
Item #2			
Hazardous waste removal	32 hours	15	480.00 (1)
Item #3			
Equipment and scrap removal	15 trips	48	720.00 (2)
30 T. crane incl. mobilization	1 day	2000	2,000.00 (3)
Loading w/FEL	24 hours	135	3,240.00 (4)
Item #4			
Dismantle bldg w/trachoe	16 hours	150	2,400.00 (3)
manpower dismantle bldg	64 hours	15	960.00 (1)
Remove bldg. and trlr	4 trips	48	192.00 (2)
Item #5			
Demolish bldg w/trachoe	6 hours	150	900.00 (3)
Item #6			
Demolition cement structures			
w/jack hammers and hoe&dozer	8 hours	255	2,040.00 (5)
Load and haul fig. cement	2 hours	166	332.00 (6)
Item #7			
Remove fence and gates	16 hours	15	240.00 (1)
Item #8			
Fill slope-cuts with hoe	900 LF	1.70	1,530.00 (7)
import fill - dozer	1000 CY	40	400.00 (8)
Item #9			
Ripping access roads dozer	1 78 Acres	363	646.00 (9)
Item #10			
Tailings pile graded	2 47 Acres	415	1,025.00 (10)
Topsoil replacement dozer	6,100 CY	.40	2,440.00 (8)
Item #11			
Scarify surface	7 Acres	35	245 00 (11)
Fertilize 100lbs p/acre			
diammonium phosphate	8 Acres	90	720 00
Hydroseed	.83 Acres	800	664 00
Broadcast seed 10.6pls p/acre	7.2 Acres	170	1,224 00
Item #12			
General site clean-up	8 Acres	50	400.00
Equipment mobilization	3 pieces	750	2,250.00
Reclamation supervision	5 days	356	1,780.00 (12)
10% Contingency			2,458 00

**Total**

**\$27,036.00**

Approximately \$3,380 average cost per acre

- (1) Assumed wage for unskilled general labor
- (2) Means 1997, 020-620-5100, \$ 48/mile for >8CY truck; assumed 100 miles round trip
- (3) Actual Contractor cost for 30 ton crane 1996
- (4) Rental Rate Blue Book 4/96
- (5) Average hourly rate for hoe and dozer with jack-hammers, average rental retail outlet prices.
- (6) Rental Rate Blue Book 4/96 and Means 1997
- (7) Contractor's actual costs, 1991 at E/053/012, Cat 225 Excavator, 40 ft. wide
- (8) Means 1997 and Rental Rate Blue Book 4/97: Cat D10N, U, mtl 2550 lb/CY, 125 ft. push
- (9) Means and Rental Rate Blue Book 4/97: Cat D10N, U, multi-shank rippers, speed 0.8mph
- (10) Means 1997 and Rental Rate Blue Book 4/97: Cat D10N
- (11) Hourly rate on Cat D10N
- (12) Means 1997, 010-036-0180, project manager, minimum \$1,780/wk

After taking into account for the extra costs involved in removing large pieces of equipment, the added cost of building removal, and soil replacement, the earlier figure of \$17,500 for total reclamation of the millsite as quoted from REDD Corporation is lacking by nearly \$9,600. However, REDD was not aware of the extra work needed to reclaim the project area. Breaking down the reclamation work sequentially has uncovered areas that were missed in our first attempt to attain the reclamation costs. Please review this revised reclamation plan and direct any comments or suggestions that you may have to Dan Proctor at 801-756-1414 ext. 46 or write to the above address. I am hoping this will meet with your approval.

Respectfully yours,

W. Dan Proctor, Chief Geologist, Clifton Mining Company, Inc.

cc: Wm Moeller  
Keith Moeller  
Robert Holladay